# Active Platelet Derived Growth Factor Subunit A (PDGFA) Instruction Manual

# SBPA139Hu01

### Homo sapiens (Human)

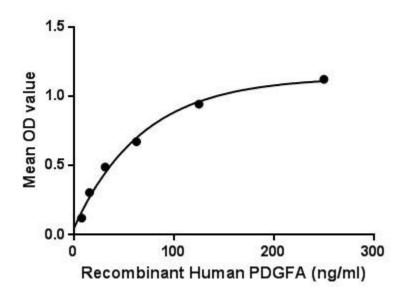
**Buffer Formulation** 20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.

**Traits** Freeze-dried powder

Purity > 90% Isoelectric Point 9.6

**Applications** Cell culture; Activity Assays.

## **ACTIVITY TEST**



Platelet Derived Growth Factor Subunit A (PDGFA) is a member of Platelet-derived growth factor (PDGF) family which plays a significant role in blood vessel formation, the growth of blood vessels from already-existing blood vessel tissue, mitogenesis, i.e. proliferation, of mesenchymal cells such as fibroblasts, osteoblasts, tenocytes, vascular smooth muscle cells and mesenchymal stem cells as well as chemotaxis, the directed migration, of mesenchymal cells. Besides, Platelet Derived Growth Factor Receptor Alpha (PDGFRa) has been identified as an interactor of PDGFA, thus a binding ELISA assay was conducted to detect the interaction of recombinant human PDGFA and

recombinant human PDGFRa. Briefly, PDGFA were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100µl were then transferred to PDGFRa-coated microtiter wells and incubated for 2h at 37°C. Wells were washed with PBST and incubated for 1h with anti-PDGFA pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37°C. Finally, add 50µL stop solution to the wells and read at 450nm immediately. The binding activity of PDGFA and PDGFRa was shown in Figure 1, and this effect was in a dose dependent manner.

Figure. The binding activity of PDGFA with PDGFRa.

#### USAGE

Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

#### **STORAGE**

Avoid repeated freeze/thaw cycles. Store at 2-8°C for one month. Aliquot and store at -80°C for 12 months.

#### **STABILITY**

The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37°C for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.

**Image** 

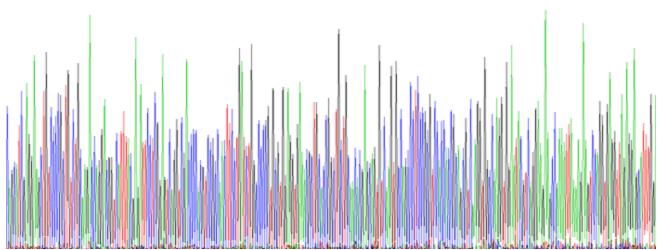


Figure. SDS-PAGE

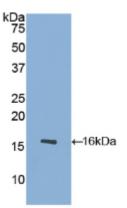


Figure. Western Blot

## [IMPORTANT NOTE]

The kit is designed for research use only, we will not be responsible for any issue if the kit was used in clinical diagnostic or any other procedures.